

## Methods of automated design of application ontology

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### Abstract

The control of completeness and information integrity of design specifications is an important problem of designing complex engineering systems. Computer aided design of textual technical documentation (technical documentation in natural language) is a complex problem. Its solution can be expected if natural (or given) limitations are imposed on the structure of the analyzed texts and an elaborated model of the application domain has been developed. In this paper, using the example of AviaOntology, the technological aspects of automatic design of applied ontologies that describe the application domain of the functioning of a complex technical system in various regimes of its operation are discussed. The problems of the use of the developed ontologies in problems of testing the information integrity of natural-language documents are considered.

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